

76. *PARUS MAJOR*, Linn. Great Tit.

Not uncommon.

77. *PARUS ULTRAMARINUS*, Bp. Ultramarine Tit.

These birds look as bright as Kingfishers, when the sun is shining on them. It might be expected that the southern climate, which has so far heightened their colour, would produce a corresponding diversity of habits and actions, as compared with our own familiar species, *Parus cæruleus*; and I think it is partially the case. Taczanowski also remarks that this Titmouse has a different voice. It goes as far south as Laghouat.

78. *PARUS LEDOUCCI*, Malh. (Plate III.)

I only obtained this species at Miliana, where I observed two pairs on the low trees upon the sides of the mountains. I did not then distinguish them from the Cole Tit (*Parus ater*), with which their habits and actions appeared to agree. The specimen in the Algiers Museum was killed at Beni Slimam. Taczanowski notes that it is found "only in Pine forests. The habits and the voice of this bird are similar to those of our *Parus ater*." Mr. Salvin has no note upon the species; nor was it ever met with by Dr. Tristram.

[To be continued.]

VI.—On the Psittacidæ of Central America.

By OSBERT SALVIN, M.A., F.L.S., F.Z.S., &c.

(Plate IV.)

HAVING recently received, in a collection from Veragua, two Parrots, one of which is apparently quite new to science, and the other new to the fauna of Central America, I take the opportunity of shortly reviewing such members of the family *Psittacidæ* as are found between the Isthmus of Darien and the northern confines of the South-Mexican avifauna.

The *Psittacidæ* having been so recently treated in Dr. Finsch's admirable volumes 'Die Papageien,' wherein the intricacies of their synonymy are carefully investigated, it is quite unnecessary in the present paper for me to retrace this portion of the subject. I have therefore merely given references to Dr. Finsch's

work, and passed on to such supplementary notes as are called for by later observations.

These notes relate almost entirely to the geographical distribution of the various species found within my limits, some of them being from personal observation, made during my visits to Guatemala. Specimens of nearly all the species mentioned are in the collection formed by Mr. Godman and myself.

All the great American groups of this family are well represented in Central America, the number of species being, in all, twenty-seven†. These belong to nine genera, and the following Table shows briefly how they are distributed over the different sections of the great Isthmus.

		S. Mexico.	Guatemala.	N. Honduras.	Nicaragua.	Costa Rica.	Veragua.	Panama.	Darien.	S. America.
1.	<i>Ara militaris</i>	*	..	..	..	..	*	*	..	*
2.	— <i>macao</i>	..	*	*	..	*	..	*	..	*
3.	— <i>chloroptera</i>	..	..	..	..	..	..	*	..	*
4.	— <i>ararauna</i>	..	..	..	..	..	..	*	*	*
5.	— <i>severa</i>	..	..	..	..	..	..	*	*	*
6.	<i>Rhynchopsitta pachyrhyncha</i>	*	..	..	..	..	..	..	..	..
7.	<i>Conurus finschi</i>	..	..	..	..	..	*	..	..	..
8.	— <i>holochlorus</i>	*	*	..	..	..	..	..	..	..
9.	— <i>petzi</i>	*	*	*	*	*	..	..	..	..
10.	— <i>ocularis</i>	..	..	..	..	..	*	*	..	..
11.	— <i>aztec</i>	*	*	*	*	..	*	..	..	..
12.	— <i>hoffmanni</i>	..	..	..	..	..	*	*	..	..
13.	<i>Brotogerys tovi</i>	..	*	*	..	*	*	*	..	*
14.	<i>Bolborhynchus lineolatus</i> ..	*	*	..	..	*	..	..	..	..
15.	<i>Pionus senilis</i>	*	*	..	..	..	..	..	..	..
16.	— <i>menstruus</i>	..	..	..	..	..	*	*	..	*
17.	<i>Caica hæmatotis</i>	*	*	*	..	*	*	*	..	..
18.	<i>Chrysotis albifrons</i>	*	*	*	..	*	..	..	..	..
19.	— <i>xantholora</i> ..	..	..	*	..	..	..	..	..	..
20.	— <i>finschi</i>	*	..	..	..	..	..	..	..	..
21.	— <i>diademata</i>	..	..	..	..	*	*	*	..	*
22.	— <i>autumnalis</i>	*	*	*	..	..	..	..	..	..
23.	— <i>guatemalæ</i>	*	*	..	..	*	*	*	..	..
24.	— <i>auripalliata</i>	..	*	*	*	*	..	..	..	..
25.	— <i>ochrocephala</i>	..	..	..	..	..	*	..	..	..
26.	— <i>levaillanti</i>	*	*	..	..	..	..	..	..	*
27.	<i>Psittacula cyanopyga</i>	*	..	..	..	..	..	..	..	..

† Other species are placed in Mr. G. R. Gray's Hand-list with Central American localities assigned to them; but these, unconfirmed by recent

No species of Parrot, except *C. carolinensis*, passes into the northern continent beyond the limits of southern Mexico. Indeed so strictly is the northern range of the family defined, that, were it not for this single exception, no more absolute definition of the northern limit of the Neotropical region (the Austro-Columbian region of Huxley) could be given than that of the northern extension of the *Psittacidae* in Mexico.

Central America has, as of all other groups of birds, a number of Parrots peculiar to itself. Some few species, and amongst these the Maccaws especially, range widely over the southern continent. Still both Mexico and Guatemala are rich in peculiar species; and Costa Rica and Veragua are not deficient in this respect.

1. *ARA MILITARIS* (Linn.).

Sittace militaris, Finsch, Papag. i. p. 396, ii. p. 943.

The range of this Maccaw in Central America is somewhat singular. We find it occurring as far north as Mazatlan, in Western Mexico (Finsch, Abh. Nat. Ver. zu Bremen, 1870, p. 352); and specimens of it were obtained by Mr. le Strange

researches, I cannot but think doubtful. Unfortunately the localities attached to many of the British-Museum specimens are so frequently without the authority of the original collector, the labels bearing only the name of the person, sometimes donor, sometimes dealer, from whom they have been acquired, that confirmation from other sources is necessary.

For this reason I omit the following from the present list:—

Hand-List, No. 8148. *CONURUS AURIFRONS*, Nicaragua? (presented by E. Wilson). This is really a Peruvian and Bolivian species.

No. 8328. *CHRYSOTIS PRETRII*, Mexico. Mr. Gray apparently quotes Temminck, Pl. Col. 492, as the authority for this locality; but Temminck gives it with hesitation. The true locality is S. Brazil (*cf.* Finsch, Papag. ii. p. 529).

No. 8351. *PSITTACULA CÆLESTIS*, Nicaragua (presented by E. Wilson).

No. 8352. *PSITTACULA CONSPICILLATA*, Nicaragua (presented by E. Wilson).

The former of these species is only known to occur in Western Ecuador, and the latter in the United States of Columbia and on the Rio Napo.

No. 8122. *CONURUS CANICULARIS*, Mexico, appears to be the same as *C. petzi* from the same country (*cf.* Finsch, Papag. i. p. 503).

No. 8325. *CHRYSOTIS ÆSTIVALIS*, Mexico, probably = *C. autumnalis* (*cf.* Finsch, Papag. ii. p. 548).

during his residence in the city of Mexico. In Guatemala the bird has never yet been met with, nor yet in Honduras; and we do not find any record of its occurrence till we come to Costa Rica, where examples were collected at Barba by Carmiol, which are now in the collection of the Smithsonian Institution. Dr. v. Frantzius also mentions it in his list of the birds of Costa Rica (J. f. Orn. 1869, p. 364).

In Veragua it seems to be not uncommon, and Arcé has sent us several specimens from the neighbourhood of Calobre.

It occurs on the Isthmus of Panama (Lawr. Ann. N. Y. Lyc. vii. p. 299), and also on the Nercua River (Cass. Pr. Ac. Phil. 1860, p. 137.).

In the southern continent this species ranges as far as Bolivia (*cf.* Finsch, *l. c.*).

In a note (P. Z. S. 1867, p. 183) on living specimens of this Macaw in the Gardens of the Zoological Society, Mr. Selater endeavours to differentiate the Mexican race from that found in the southern continent, and adopts Bechstein's name *ambigua* for the northern bird, retaining the name *militaris* for the southern. Judging from a Bogota skin in his own collection, Mr. Selater says that the smaller bird is that found in South America, and hence concludes that the larger belongs to Mexico. With Veraguan and Mr. le Strange's Mexican specimens before me, exactly the opposite conclusion presents itself: the Veraguan specimens are the larger. Therefore, in the face of this difficulty, I am indisposed to admit of the existence of two species depending for their validity on disparity of size alone.

2. *ARA MACAO* (Linn.).

Ara aracanga, Sel. & Salv. Ibis, 1859, p. 137; P. Z. S. 1864, p. 367.

Sittace macao, Finsch, Papag. i. p. 398.

Though included by Lichtenstein in his 'Preisverzeichniss der Thiere aus Mexico,' *Ara macao* has never been sent from within the limits of Mexico by any naturalist since the days of Deppe and Scheide (1830); and I think it probable that, if the species really occurs in Mexico at all, it is only to be found in the forest country, on the Pacific side of the Isthmus of Tehuantepec.

In Guatemala it is abundant, both on the Pacific side of the Cordillera, and also in Vera Paz. I found it also in the open Pine-ridges of Poctun, on the road from Cahabon to Peten; and I also saw occasionally a pair flying high over the plain of Salamá, which lies in the interior of Guatemala, at an elevation of about 3000 feet above the sea-level. It does not usually range above this elevation; but in all the lowland country where forests extend it is common. Throughout the country it is known under the name 'Guacamaya.'

In Honduras, Mr. G. C. Taylor met with it near Comayagua, and Leyland obtained specimens in the vicinity of Omoa.

From Costa Rica, Carmiol has sent us specimens; and the Smithsonian Institution has received examples from Los Anonos in the same republic. Dr. v. Frantzius (J. f. Orn. 1869, p. 364) tells us that this species is found on the south-west side of the mountains, *A. militaris* taking its place on the north-east side.

No specimens have yet reached me from Veragua; but from Panama I have received skins from the late Mr. M'Leannan, who also forwarded others to Mr. Lawrence.

Southward of the Isthmus, this species has an extensive range.

3. *ARA CHLOROPTERA*, G. R. Gray.

Sittace chloroptera, Finsch, Papag. i. p. 403.

This species though ranging over nearly the whole of the tropical portions of the southern continent, only comes within the limits of Central America at Panama, where M'Leannan obtained specimens, and forwarded them to us (*cf.* P. Z. S. 1864, p. 367).

4. *ARA ARARAUNA* (Linn.).

Sittace ararauna, Finsch, Papag. i. p. 410.

This well-known species seems to be of uncertain occurrence in Central America. Specimens were obtained near the mouth of the Atrato by the naturalists who accompanied Lieut. Michler's Darien expedition (Cassin, Pr. Ac. Phil. 1860, p. 137).

I have only seen one authentic Central-American specimen; and this was obtained for us near Chépo, on the Isthmus of



J G Keulemans lith

M & N Hanhart imp

CONURUS FINSCHI.

Panama, by Arcé in 1864. Neither M'Leannan, nor any of the collectors in Costa Rica seems to have met with it. Dr. Finsch, *l. c.*, quotes Leyland for its occurrence in Honduras; but I can find no record of it in the published list of Leyland's birds (*cf.* P. Z. S. 1859, p. 59).

5. *ARA SEVERA* (Linn.).

Sittace severa, Finsch, Papag. i. p. 417.

Mr. Lawrence records (Ann. Lyc. N. Y. vii. p. 474) having received a specimen from Panama, sent him by M'Leannan; and the bird was observed by the collectors of Lieut. Michler's expedition at the mouth of the river Nercua (Pr. Ac. Phil. 1860, p. 137). There is also a specimen in the British Museum said to have come from Nicaragua; but this locality requires confirmation. I myself have never seen a Central-American specimen of this Maccaw.

6. *RHYNCHOPSITTA PACHYRHYNCHA* (Sw.).

Sittace pachyrhyncha, Finsch, Papag. i. p. 428.

This species is quite restricted in its range to Mexico, where it has been obtained by most of the collectors who have visited that country. Though included in *Sittace* by Finsch, the densely feathered lores suggest its close relationship to the genus *Conurus*. The bill, however, is that of an *Ara*.

7. *CONURUS FINSCHI*, sp. n. (Plate IV.)

Prasinus, subtus paulo dilutior; fronte, campterio, et subalaribus exterioribus coccineis; remigibus subtus flavo tinctis: macula tibiali postice rubra: rostro flavo, pedibus pallide corylinis. Long tota 11 (poll. angl.), alæ 6·2, cauda rectr. med. 5·5, rectr. ext. 2·6, tarsi 0·6.

Hab. Bugaba, Chiriqui, Veragua (*Arcé*).

Mus. S. & G.

Obs. *C. wagleri* et *C. frontato* affinis, ab illo subalaribus coccineis, ab hoc statura minore et vertice dimidio antico solum coccineo differt.

During his recent expedition to Chiriqui, Arcé obtained three specimens of this Parrot near Bugaba, a village situated to the westward of David, and upon the southern slope of the volcano of Chiriqui. [See map accompanying my paper on the birds of Veragua, P. Z. S. 1870, t. xvii.]

Believing the species to be undescribed, I sent specimens to Dr. Finsch, of Bremen, for further examination. He writes respecting them as follows:—"The *Conurus* is, undoubtedly, an excellent new species, as you suspect. I have examined the bird accurately, and find it nearly allied to *C. wagleri*, having the red on the forehead quite as in that species. *C. wagleri*, however, has the under wing-coverts along the metacarpus green, whereas in the new bird they are red. The size, too, of the new species is much less, the wing measuring 5 inches 10 lines (German) instead of 6 in. 2 lines, the dimensions of the smallest *C. wagleri*. *C. frontatus*, Cab., from Peru, is far more nearly allied: in it the under wing-coverts are also red; but this colour is confined to the edge of the metacarpus. *C. frontatus*, too, has the whole vertex red, and is even larger than *C. wagleri*, the wing measuring 8 in. 4 lines."

I have named this species after Dr. Finsch, whose monograph of the *Psittacidae* will long remain the standard work on this family.

8. *CONURUS HOLOCHLORUS*, Schl.: Finsch, Papag. i. p. 466.

This species is found in great abundance in the highlands of Southern Mexico and Guatemala. The original specimen, which formed the type of Sclater's description, came from Jalapa, whence it was sent by M. de Oca (Ann. N. H. ser. 3, iv. p. 224, 1859). Throughout Guatemala, this *Conurus* is found wherever Indian corn is grown in the vicinity of the upland villages. So far as I am aware, it seldom descends below an elevation of 4000 feet; but above that limit it may frequently be seen. It is said to breed in large numbers in the tablelands lying between Chimaltenango and Panajachel; and one of the ravines traversed by the track between these villages takes its name "el Barranco de los Chocoyos" from the number of these Parrots frequenting it.

9. *CONURUS PETZI* (Wagl.): Finsch, Papag. i. p. 502.

This species, though locally distributed, is found from Mexico to Costa Rica. In the former country specimens were obtained by Deppe, and more recently by Sallé at Acapulco. In Guatemala I found it abundant at Agua Caliente, near where the road from the capital to Salama crosses the Rio Motagua. Mr. G. C. Taylor observed it in Honduras, Delattre in Nicara-

gua, and Dr. v. Frantzius, the Carniols, and Zeledon in Costa Rica. Southward of this point this species has not been recorded, as neither Arcé in Veragua, nor M'Leannan at Panama have met with specimens.

10. *CONURUS OCULARIS*, ScL. & Salv.

Conurus pertinax, Finsch, Papag. i. p. 506 (partim).

This species is restricted in its range to the Panama railway-line and the adjoining districts of Veragua. If constancy of character indicates specific distinction, this bird is entitled to specific rank. I have examined a score of specimens, none of which show any tendency to vary from one another, and all exhibit a certain difference from more southern examples.

11. *CONURUS AZTEC*, Sonancé: Finsch, Papag. i. p. 522.

This species is confined to the northern portions of the Central-American isthmus. The Mexican collectors seem to have met with it both on the east and west side of the Republic. In Guatemala it is not common. I found it at Cahabon in Vera Paz, and also in the vicinity of Peten; Leyland observed it near Belize, and Dr. Schott in Yucatan (Lawr. Ann. L. N. Y. ix. p. 207); and recently Whitely obtained specimens at San Pedro, in Honduras; Taylor also met with it near Comayagua. The most southern localities recorded for the occurrence of this Parrot are:—the Blewfields river, where Mr. H. Wickham obtained specimens (*cf.* P. Z. S. 1867, p. 280); and Greytown, where Mr. Holland procured it (*cf.* Lawr. Ann. L. N. Y. viii. p. 185).

12. *CONURUS HOFFMANNI*, Cab.: Finsch, Papag. i. p. 533; ScL. & Salv. Ex. Orn. t. lxxxi.

This *Conurus* is entirely restricted to Costa Rica and the adjoining highlands of Veragua, whence Arcé has sent numerous specimens. It is the only species of this section of *Conurus* found in Central America.

13. *BROTOGERYS TOVI* (Gm.): Finsch, Papag. ii. p. 99.

Though not found in Mexico, this is a common species in the lowland forests of Guatemala, in the districts adjoining the Pacific Ocean, where I obtained specimens near the hacienda La Concepcion and also at Chiapam, on the coast. I have no

record of having personally met with it anywhere in Vera Paz, or on the Atlantic side of the Cordillera, and now think that the locality 'Coban' cited in Mr. Selater's and my paper (Ibis, 1860, p. 44), which was taken from a skin, may be erroneous. Mr. Taylor found *Brotogetys tovi* in Honduras; and Arcé obtained specimens on the Gulf of Nicoya, in Costa Rica. The last-named collector has also forwarded us numerous specimens from Chiriqui and Calobre in Veragua. M'Leannan forwarded us examples from Panama. Lastly, specimens were obtained on the Atrato by Lieut. Michler's expedition (Proc. Ac. Phil. 1860, p. 137). Southward of this point, *B. tovi* passes into Columbia, and is not unfrequently seen in the well-known collections from Bogota*.

14. *BOLBORHYNCHUS LINEOLATUS* (Cass.): Finsch, Papag. ii. p. 130.

This is by no means a common species, though of wide range. In Southern Mexico Sallé obtained specimens near Cordova; and Mr. White's collection, formed in the vicinity of Mexico, contained an example (P. Z. S. 1864, p. 177). Dr. Cabot found it on the island of Cozumel, off the coast of Yucatan; and in Guatemala Mr. Godman and I discovered a small flock in the Volcan de Fuego, at an elevation of about 8000 feet above the sea-level. We saw them in a tree overhanging the track to Acatenango, above the Indian huts of Calderas, and succeeded in securing three or four specimens before the rest took fright and flew away.

In a collection recently forwarded to us from Costa Rica by

* *BROTOGERYS SUBCÆRULEA* (Lawr.): Finsch, Papag. ii. p. 97, t. 2.

Dr. Finsch, *l. c.*, considers this bird to belong to a good species. For my own part, without having seen the original specimen, I cannot but think that the blue colouring of the plumage is accidental, and due to a deficiency in the yellow element of the normally green colour of the feathers. M'Leannan, who shot the specimen from which Mr. Lawrence took his description (the only one, I believe, that has ever been obtained), considered it only a variety of *B. tovi*, with individuals of which species he found it associating.

I notice that in some specimens in our series of *B. tovi*, the feathers of the back are bluer than in others. *B. subcærulea* may only show an extreme development of this tendency.

Carmioli, we found a single example; and this is the only record of the occurrence of the species in the southern portion of Central America.

It would appear, however, to be likewise found in the southern continent, as there is said to be a specimen in the Paris Museum, which was forwarded in the fine series of Venezuelan birds now in that collection by M. Levraud. If distinct, this latter bird must bear the name *B. tigrina* (Souancé).

15. *PIONUS SENILIS* (Spix): Finsch, Papag. ii. p. 460.

There can be little doubt that Spix committed an error when he described and figured this species in his great work on the birds of Brazil, giving that country as its habitat. The species is now well known as an inhabitant of Central America, having been obtained in various parts of that country. In Mexico, Deppe procured it for the Berlin Museum, and Sallé also found it near Cordova. It is common in the province of Vera Paz, in Guatemala. Mr. Godman and I obtained specimens near Coban, and also at Choctum, in January and February, 1862; and I also observed it at Lanquin, to the eastward of the former town. It occurs also at Greytown, Nicaragua (*cf.* Lawr. Ann. L. N. Y. viii. p. 185)—and in Costa Rica, the collection of the Smithsonian Institution containing specimens from San Jose and Barranca. We also have a specimen collected by Carmiol at Angostura. This species does not appear to be found in more southern districts.

16. *PIONUS MENSTRUUS* (Linn.): Finsch, Papag. ii. p. 441.

This wide-ranging South-American species penetrates but a short way beyond the confines of Central America. The most southern point within our limits where it has as yet been observed is Chépo. Here Arcé obtained several examples in 1864. On the Panama railway it would appear to be common, specimens having been usually included in M'Leannan's collections. Northward of this point Arcé found it at Santa Fé and Calobre, in Veragua, and again in the neighbourhood of Chiriqui—where, however, it would appear to have reached the limits of its range, as none of the collectors in Costa Rica have observed it.

17. *CAICA HÆMATOTIS*, Scl. & Salv.: Finsch, Papag. ii. 420.

M. Boucard obtained examples of this species at Playa Vicente in Southern Mexico (Scl. P. Z. S. 1862, p. 20); and this is, I believe, the only occasion on which the bird has been seen within the limits of Mexico. In Guatemala it is common in the forests of Vera Paz. The first specimens I obtained were shot in the highland forests above the village of Lanquin, in Vera Paz. Mr. Godman and I frequently saw it in the neighbourhood of Choctum in January and February, 1862; and I afterwards met with it in my journey to Peten, in the forests north of Cahabon, near the rancho of Chimuchuch. Mr. G. M. Whitely has recently brought specimens of this Parrot from San Pedro, in Honduras; and the bird-collectors of Costa Rica seem familiar with it. Carmiol has sent skins of it from Pacuar to the Smithsonian Institution, and others to us from Angostura. Arcé, too, met with it at Santa Fé, in Veragua, and M'Leannan near Lion Hill, on the Panama railway. These last show a few red feathers on the chest, upon which character chiefly Mr. Lawrence based the species he called *C. coccineicollaris*. The feature is of slight value, being of variable amount; but it must be remarked that it is possessed by the Panama specimens alone, not even the Santa-Fé examples showing any indications of such a marking.

18. *CHRYSOTIS ALBIFRONS* (Sparrrn.): Finsch, Papag. ii. p. 526.

With the exception of Col. Grayson (*cf.* Finsch, Abh. Nat. Ver. zu Bremen, 1870, p. 321), modern travellers in Mexico do not seem to have met with this Parrot. According to Wagler, it is one of the species mentioned by Hernandez; and Deppe sent specimens of it to the Berlin Museum (Finsch, *l. c.*). In Yucatan Dr. Schott observed it near Merida (Lawr. Ann. L. N. Y. ix. p. 207). In Guatemala it is always to be seen in the trees near the hot-water springs of Agua Caliente, on the road to Vera Paz, close to the bridge over the river Motagua. I once saw a flock at the side of the great ravine which separates the active peak of the Volcan de Fuego from the more ancient summits. This was not less than 8000 feet above the sea-level. It also occurs on the Pacific side of the Cordillera

and specimens were often brought to us from the forest-clad mountain-slopes below Dueñas. Mr. G. C. Taylor (Ibis, 1860, p. 121) found this species at San Pedro, near the northern sea-board of the Republic of Honduras; and very recently Mr. Whitely obtained specimens at the same spot. The most southern limit of its range seems to be the shores of the gulf of Nicoya, where Dr. v. Frantzius and M. Zeledon both procured examples (Ann. Lyc. N. Y. ix. p. 131; J. f. Orn. 1869, p. 366). I have never seen skins of it in any of the extensive collections from Veragua and Panama.

19. *CHRYSOTIS XANTHOLORA*, G. R. Gray: Finsch, Papag. ii. p. 528.

I never met with this species in a wild state, and the only specimens I have seen are those in the British and Leyden Museums. That in the former collection is said to have been obtained by Dyson in Honduras, and hence the title of the species to appear in the present list.

20. *CHRYSOTIS FINSCHI*, Sel.: Finsch, Papag. ii. p. 543.

This species, though confined to Southern Mexico, appears to have been sent by Sallé only in one of his earlier collections (cf. Sel. P. Z. S. 1857, p. 230, sub *C. viridigenalis*). None of his correspondents seem to have obtained examples; at least there are no records of such having been the case. The species is closely allied to *C. diademata*, but, according to Finsch (*l. c.*), is smaller, and has the under surface of a uniform golden green, without dark edgings to the feathers. The base of the inner web of the outer rectrix has a red patch.

21. *CHRYSOTIS DIADEMATA* (Spix): Finsch, Papag. ii. p. 545: Salv. Ibis, 1870, p. 113.

C. viridigenalis, Sel. & Salv. P. Z. S. 1864, p. 368; Lawrence, Ann. Lyc. N. Y. ix. p. 131.

C. autumnalis, v. Frantzius, J. f. Orn. 1869, p. 365.

Admitting Dr. Finsch's determination of this species to be correct, I have no doubt that the names I quote above are all applicable to the same bird. I have seen numerous specimens from Panama; and from Veragua Arcé has sent us several examples. Our collection also contains specimens from Costa

Rica, collected by Carmiol; hence I infer that the bird called *C. viridigenalis* by Mr. Lawrence (Ann. Lyc. N. Y. ix. p. 131) really belongs here. Dr. v. Frantzius (J. f. Orn. 1869, p. 365) considers the Smithsonian skins referable to *C. autumnalis*; but, from the fact of the presence of the true *C. diademata* in Costa Rica, I think he is in error, and that the latter species is really what he had before him.

The species is readily distinguishable from *C. autumnalis* by having the cheeks green instead of yellow.

Its nearest ally is *C. finschi*, the species last mentioned.

22. *CHRYSOTIS AUTUMNALIS* (Linn.): Finsch, Papag. ii. p. 547.

This species is restricted in its range to Southern Mexico, Guatemala, and the northern portion of Honduras. In Mexico Sallé obtained it at Jalapa (cf. Sci. P. Z. S. 1857, p. 205), and Boucard also sent specimens from Playa Vicente (Sci. P. Z. S. 1859, p. 389). In Guatemala its range seems restricted to the forest-districts of the northern portion of Vera Paz. During an expedition to Choctum, an Indian village about two days' journey north of Coban, and situated about 1200 feet above the sea-level, in the Tierra Caliente, Mr. Godman and I frequently saw flocks of this species, and obtained specimens. I am not aware that it is found in any other parts of Guatemala. In Honduras, Leyland records it from Omoa; and Mr. G. M. Whitely has recently sent specimens from San Pedro, in the same republic. There are no authentic records of its occurrence further to the southward of this point.

23. *CHRYSOTIS GUATEMALÆ*, Sci.: Finsch, Papag. ii. p. 562, t. 4.

Though a specimen of this Parrot seems to have been in the Bremen Museum since 1844, the first description of it appeared in 'The Ibis' for 1860, p. 44, where it is named *C. guatemalæ*, as suggested by Dr. Hartlaub. About the same time fresh examples were forwarded by Sallé from Orizaba (P. Z. S. 1860, p. 44). In Guatemala this Parrot is very common at Choctum, in the forest of Vera Paz, where it is known as the Cho-cho. Mr. Godman and I obtained a good series of specimens in 1862. Mr. Whitely has recently brought

skins of it to England, which he collected at San Pedro, in Honduras. It also appears to be abundant in Costa Rica, where Carmiol obtained examples at Cervantes. These are referred by Mr. Lawrence (Ann. Lyc. N. Y. ix. p. 131) and Dr. v. Frantzius (J. f. Orn. 1869, p. 365) to *C. pulverulenta*; but I have little doubt they really belong to *C. guatemalæ*, as specimens in our collection from Costa Rica do not differ from Guatemalan examples (*cf.* Salv. Ibis, 1870, p. 113). From Veragua we have received specimens from Arcé (P. Z. S. 1870, p. 214); and Mr. Lawrence, under the name *Psittacus pulverulentus*, includes it in his Catalogue of M^r Leannan's collection from Panama (Ann. Lyc. N. Y. viii. p. 11).

24. *CHRYBOTIS AURIPALLIATA* (Less.): Finsch, Papag. ii. p. 568.

There is no authentic instance of the occurrence of this Parrot in Mexico. In Guatemala it is common, but only in the forest-region of the Pacific side of the Cordillera. Though thus restricted in its range, it is by far the commonest species observed domesticated throughout the Spanish houses of the country. In Honduras, it still seems restricted to the Pacific coast, being abundant on Tigre Island, in the bay of Fonseca (G. C. Taylor, Ibis, 1860, p. 121). The same may be said for Nicaragua, Lesson's type having been obtained at the Pacific port of Realejo. In Costa Rica, however, we are told by Dr. v. Frantzius (J. f. Orn. 1869, p. 365), that it is found on the banks of the river Sarapiquí, which discharges itself into the Rio San Juan, and thence into the Atlantic Ocean.

25. *CHRYBOTIS OCHROCEPHALA* (Gm.): Finsch, Papag. ii. p. 584.

Though this widely-distributed and well-known species has been already observed in Columbia, Selater's collection containing a specimen sent from Bogota by Mr. Mark, it has not hitherto been detected within the limits of Central America. In a collection recently received from our collector Arcé we found a single female specimen, which had been shot at Chiriqui, so that this species must now be added to the already rich series of Parrots found in Central America.

26. *CHRYSTOTIS LEVAILLANTI*, G. R. Gray: Finsch, Papag. ii. p. 580.

This species, which has received a number of names (*cf.* Finsch, *l. c.*), is best known from Mexico, where most of the travellers who have visited that country seem to have met with it. Deppe sent specimens of it to the Berlin Museum as long ago as 1824; and Sallé and Boucard both obtained it at Rio Grande and Playa Vicente (*cf.* *Scl. P. Z. S.* 1857, p. 230, et 1859, p. 389). According to Finsch, it has been sent from the Tres Marias Islands; and a specimen of it from Jalapa is stated to be in the Heine collection. In Guatemala I have no certain knowledge of its occurrence, though I have little doubt it may be found at Peten and the adjoining districts of Yucatan. At Belize it may frequently be seen as a cage-bird, being doubtless found in the neighbouring forests.

27. *PSITTACULA CYANOPYGA*, Souancé: Finsch, Papag. ii. p. 662, et *Abh. Nat. Ver. zu Bremen*, 1870, p. 352.

This species has been recently obtained in the Tres Marias Islands, off the coast of Western Mexico, by Col. Grayson, and forwarded to the Bremen Museum (*cf.* Finsch, *l. c.*). The avifauna of this group of islands is most remarkable, and, viewed with reference to the geographical distribution of species, offers a most perplexing problem for solution. At present we probably know only a fragment of their whole bird population, which well merits the attention of some enterprising naturalist.

VII.—*Descriptions of Two new Species of African Birds.*

By R. B. SHARPE, F.L.S., Libr. Z.S.

IN a collection recently sent to me from Fantee by His Excellency Governor Ussher I have received many very interesting birds, details of which I hope shortly to be able to lay before the readers of 'The Ibis;' but I may be pardoned for at once bringing before their notice one of the most interesting ornithological discoveries likely to be made for some time, being no less than a new species of *Scotopelia*, which I propose to call, after Mr. Ussher, the discoverer of this fine novelty:—